REMARKS:

Minor corrections have been made in the claims and specification to correct the points noted by the Examiner under 35 U.S.C.112.

The claims have been very carefully revised and corrections made to provide consistency of language and proper antecedents throughout. It is believed that the amendments made and their effect will be apparent from the above without the necessity of individual comment.

Independent Claim 21 has been cancelled and Claims 13, 16 and 19 have been amended so that they are now independent. Thus there are now a total of four independent claims requiring a fee payment for one extra independent claim.

The Commissioner is hereby authorized to charge (1 x $100) = $100 to our Deposit Account No: 01-0310. A duplicate copy of this sheet is enclosed.

With regard to the provisional double patenting rejection based on Application Serial No. 10/671,664 of the present Applicant, it is pointed out that this prior application is now abandoned and will not be pursued so that this rejection is now moot.

With regard to **Claims 13, 16 and 19**, the Examiner has kindly indicated the allowability of Claims 13, 16 and 19 (amongst others) and these claims have been amended so that they incorporate all of the features of original Claim 1 together with the features of the respective dependent clams and any intermediate clam where necessary. It is submitted therefore that each of these claims is in good order for allowance without further comment.

With regard to **Claim 1**, this has been amended to more clearly point out the features of the claim and to more clearly distinguish the claim from the prior art and particularly that of UK1551692 (Verloop). In particular Claim 1 now includes the features of original Claim 10 which is now cancelled.

The Examiner rejected original claim 10 under 35 U.S.C.102 based on Verloop but not based on Carter, so that no comment is required on the latter.

The present application as defined in Claim 1 has the following key features of distinction from Verloop.

1. The present application injects rich amine from the first absorber onto an intermediate stage of the second or selective absorber because the rich amine still has capacity to absorb H_2S. One rich stream flows to the regeneration system, not two.

2. The present application deliberately designs the first absorber to selectively absorb H_2S and thereby create the initial enrichment of the H_2S/CO_2 ratio by allowing CO_2 to "Slip". This reduces the enrichment required in the rest of the system.

These features provide the following advantages:

A) The rich amine stream from the first absorber is loaded with acid gas but still has capacity to absorb H_2S at the conditions in the selective absorber. By loading the amine more fully it makes each gallon of amine more effective in absorbing H_2S, and by taking up a portion of the absorption load it permits reducing the lean

circulation to the second or selective absorber. This will reduce process heat, condensing load and pumping horsepower.

B) By carefully balancing circulation rate, number of contact stages, and liquid residence time in the first absorber it is possible to selectively absorbs H_2S from the starting gas while only partially absorbing the CO_2 . Rich amine exiting the absorber will therefore have a higher H_2S/CO_2 ratio than the starting gas which is the initial step in acid gas enrichment in the present application. Reducing acid gas pickup in the amino will reduce circulation rate, reduce equipment size, reduce process heat and cooling loads, and reduce pumping horsepower.

Verloop does not use rich amine as absorbent in the second or selective absorber, only lean amine flows to the selective absorber. Refer to page 3, line 10, lines 32-45.

However, there is some ambiguity in this on page 3, lines 115 to 122 which states that liquid flowing to the second selective absorber need not be "completely regenerated" but could also be "partly loaded with gas". This suggests that the liquid could be partially regenerated, leaving a residue of acid gas in the amine. Partially regenerated amine could come from an intermediate stage of the regenerator whereas completely regenerated amine would come from the bottom stage.

Verloop states little or no selective absorption occurs in the absorber treating the staring gas. Refer to page 2, lines 115-120, page 4, line 31.

It is submitted therefore that all of the four independent claims and their respective dependent claims is allowable in view of the foregoing and reconsideration of this application is respectfully requested.

Respectfully submitted

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Enc.(2)

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300, on March 10, 2006

LYNN LEATHERDALE

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